

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION

STMICROELECTRONICS, INC.
Plaintiff,

VS.

**MOTOROLA, INC. AND
FREESCALE SEMICONDUCTOR, INC.**
*Defendants,
Counterclaim Plaintiffs*

VS.

**STMICROELECTRONICS, N.V., AND
STMICROELECTRONICS, INC.**
Counterclaim Defendants

CIVIL ACTION NO. 4:03-CV-276

JURY TRIAL

**COUNTERCLAIM DEFENDANT STMICROELECTRONICS, N.V.'S REPLY TO MOTOROLA'S
FOURTH AMENDED COUNTERCLAIMS**

In response to the Counterclaims asserted by Defendants Motorola, Inc. (“Motorola”) and Freescale Semiconductor, Inc. (“Freescale”) (collectively “Defendants” or “Counterclaim-Plaintiffs”), STMicroelectronics, N.V. (“ST NV”) answers as follows:

1. On information and belief, ST NV admits the allegations in Paragraph 1 of the Counterclaims.
2. On information and belief, ST NV admits that Freescale is a Delaware corporation, but it is without sufficient knowledge or information to form a belief as to the truth of the remaining allegations contained in Paragraph 2 of the Counterclaims and, therefore, denies those allegations.
3. Responding to Paragraph 3 of the Counterclaims, ST NV admits that STMicroelectronics, Inc. ("ST INC") is a Delaware corporation having its principal place of

business at 1310 Electronics Drive, Carrollton, Texas 75006. ST NV admits that ST INC sells semiconductor products throughout the United States and in this District. The remaining allegations in Paragraph 3 state a proposition of law to which no response is required.

4. Responding to Paragraph 4 of the Counterclaims, ST NV admits that ST NV is a corporation organized under the laws of the Netherlands with its registered office in Amsterdam, WTC Schiphol Airport, Schiphol Boulevard 265, 1118 BH Schiphol Airport, Amsterdam and its headquarters office in Geneva, 39 Chemin du Champ-des-Filles, 1228 Plan-les-Ouates, Geneva, Switzerland. ST NV admits that ST INC is an indirect subsidiary of ST NV. ST NV admits that it sells semiconductor products in the United States and this District, but ST NV denies that it has U.S. sales offices. The remaining allegations in Paragraph 4 are denied, and, insofar as the allegations state a proposition of law, no response is required.

5. Responding to Paragraph 5 of the Counterclaims, ST NV admits that the Counterclaims arise under the patent laws of the United States and invoke this Court's jurisdiction under 28 U.S.C. §§ 1331, 1338, and 2201.

6. Responding to Paragraph 6 of the Counterclaims, ST NV denies the allegations.

7. On information and belief, ST NV admits the allegations in Paragraph 7 of the Counterclaims.

8. On information and belief, ST NV admits the allegations in Paragraph 8 of the Counterclaims as to ST INC but denies the allegations as to ST NV.

9. On information and belief, ST NV admits the allegations in Paragraph 9 of the Counterclaims as to ST INC but denies the allegations as to ST NV.

10. On information and belief, ST NV denies the allegations in Paragraph 10 of the Counterclaims.

11. On information and belief, ST NV denies the allegations in Paragraph 11 of the Counterclaims.

12. On information and belief, ST NV admits the allegations in Paragraph 12 of the Counterclaims.

13. On information and belief, ST NV admits the allegations in Paragraph 13 of the Counterclaims as to ST INC but denies the allegations as to ST NV.

14. On information and belief, ST NV admits the allegations in Paragraph 14 of the Counterclaims as to ST INC but denies the allegations as to ST NV.

15. On information and belief, ST NV denies the allegations in Paragraph 15 of the Counterclaims.

16. On information and belief, ST NV denies the allegations in Paragraph 16 of the Counterclaims.

17. On information and belief, ST NV admits the allegations in Paragraph 17 of the Counterclaims.

18. On information and belief, ST NV admits the allegations in Paragraph 18 of the Counterclaims as to ST INC but denies the allegations as to ST NV.

19. On information and belief, ST NV admits the allegations in Paragraph 19 of the Counterclaims as to ST INC but denies the allegations as to ST NV.

20. On information and belief, ST NV denies the allegations in Paragraph 20 of the Counterclaims.

21. On information and belief, ST NV denies the allegations in Paragraph 21 of the Counterclaims.

22. On information and belief, ST NV admits the allegations in Paragraph 22 of the Counterclaims.

23. On information and belief, ST NV denies the allegations in Paragraph 23 of the Counterclaims.

24. On information and belief, ST NV denies the allegations in Paragraph 24 of the Counterclaims.

25. On information and belief, ST NV denies the allegations in Paragraph 25 of the Counterclaims.

26. On information and belief, ST NV denies the allegations in Paragraph 26 of the Counterclaims.

27. ST NV admits that United States Patent No. 5,155,563 (the '563 patent), entitled "Semiconductor Device Having Low Source Inductance," identifies Robert B. Davies, Robert J. Johnson, and Francine Y. Robb as inventors; that it was issued by the United States Patent and Trademark Office on October 13, 1992; and that a copy of the '563 patent was attached to Motorola's pleading. ST NV is without sufficient knowledge or information to form a belief as to the truth of the remaining allegations contained in Paragraph 27 of the Counterclaims and, therefore, denies those allegations.

28. ST NV admits that United States Patent No. 4,548,654 (the '654 patent), entitled "Surface Denuding of Silicon Wafer," identifies Philip J. Tobin as the inventor; that it was issued by the United States Patent and Trademark Office on October 22, 1985; and that a copy of the '654 patent was attached to Motorola's pleading. ST NV is without sufficient knowledge or information to form a belief as to the truth of the remaining allegations contained in Paragraph 28 of the Counterclaims and, therefore, denies those allegations.

29. ST NV admits that United States Patent No. 5,776,798 (the '798 patent), entitled "Semiconductor Package and Method Thereof," identifies Son Ky Quan, Samuel L. Coffman, Bruce Reid, Keith E. Nelson, and Deborah A. Hagen as inventors; that it was issued by the United States Patent and Trademark Office on July 7, 1998; and that a copy of the '798 patent was attached to Motorola's pleading. ST NV is without sufficient knowledge or information to form a belief as to the truth of the remaining allegations contained in Paragraph 29 of the Counterclaims and, therefore, denies those allegations.

30. ST NV admits that United States Patent No. 5,084,814 (the '814 patent), entitled "Data Processor with Development Support Features," identifies John J. Vaglica, Jay A. Hartvigsen, and Rand L. Gray as inventors; that it was issued by the United States Patent and Trademark Office on January 28, 1992; and that a copy of the '814 patent was attached to Motorola's pleading. ST NV is without sufficient knowledge or information to form a belief as to the truth of the remaining allegations contained in Paragraph 30 of the Counterclaims and, therefore, denies those allegations.

31. ST NV is without sufficient knowledge to form a belief as to the truth of the allegations in Paragraph 31 of the Counterclaims and, therefore, denies the allegations in that paragraph. Further, upon information and belief, Motorola has no right, title, or interest in the '563, '654, '814, or '798 patents and has no standing as a Counterclaim-Plaintiff in this action.

BACKGROUND

32. Responding to Paragraph 32 of the Counterclaims, ST NV admits that the Motorola patents-in-suit relate to semiconductor technologies but denies the remaining allegations in Paragraph 32.

33. ST NV denies the allegations in Paragraph 33 of the Counterclaims.

34. Responding to Paragraph 34 of the Counterclaims, ST NV admits that the filing of the Counterclaims constitutes notice in accordance with 35 U.S.C. § 287 but denies the remaining allegations in Paragraph 34.

COUNT I

35. ST NV repeats its responses to the Counterclaims as stated in Paragraphs 27 through 34 above as if set forth fully herein.

36. ST NV denies the allegations in Paragraph 36 of the Counterclaims.

37. ST NV denies the allegations in Paragraph 37 of the Counterclaims.

38. ST NV denies the allegations in Paragraph 38 of the Counterclaims.

COUNT II

39. ST NV repeats its responses to the Counterclaims as stated in Paragraphs 27 through 34 above as if set forth fully herein.

40. ST NV denies the allegations in Paragraph 40 of the Counterclaims.

41. ST NV denies the allegations in Paragraph 41 of the Counterclaims.

COUNT III

42. ST NV repeats its responses to the Counterclaims as stated in Paragraphs 27 through 34 above as if set forth fully herein.

43. ST NV denies the allegations in Paragraph 43 of the Counterclaims.

44. ST NV denies the allegations in Paragraph 44 of the Counterclaims.

45. ST NV denies the allegations in Paragraph 45 of the Counterclaims.

COUNT IV

46. ST NV repeats its responses to the Counterclaims as stated in Paragraphs 27 through 34 above as if set forth fully herein.

47. ST NV denies the allegations in Paragraph 47 of the Counterclaims.

48. ST NV denies the allegations in Paragraph 48 of the Counterclaims.

49. ST NV denies the allegations in Paragraph 49 of the Counterclaims.

RESPONSE TO PRAYER FOR RELIEF

ST NV denies that the Defendants are entitled to any of the relief sought in its prayer or any relief whatsoever

AFFIRMATIVE DEFENSES

ST NV hereby pleads the following affirmative defenses to the Counterclaims:

FIRST AFFIRMATIVE DEFENSE

50. ST NV has not infringed any claims of the '563, '654, '798, or '814 patents ("the patents-in-suit"). ST NV has not actively induced infringement of or contributorily infringed any claims of these patents.

SECOND AFFIRMATIVE DEFENSE

51. The '563, '654, '798, and/or '814 patents are partially or wholly invalid and/or unenforceable at least for failure to meet the requirements of Title 35 of the United States Code, particularly, but not limited to, 35 U.S.C. §§ 101, 102, 103, and 112.

THIRD AFFIRMATIVE DEFENSE

52. The Counterclaims are barred by laches and/or equitable estoppel.

FOURTH AFFIRMATIVE DEFENSE

53. The Counterclaims are barred by license and/or contract.

FIFTH AFFIRMATIVE DEFENSE

54. Motorola's remedies for infringement of the '798 patent and the '654 patent, if any, are limited by 35 U.S.C. § 287(b).

SIXTH AFFIRMATIVE DEFENSE

55. Motorola's remedies for infringement of the '563 patent and the '814 patent, if any, are limited by 35 U.S.C. § 287(a).

SEVENTH AFFIRMATIVE DEFENSE

56. On information and belief, the '798 patent is unenforceable as a result of inequitable conduct in its procurement, including but not limited to the following acts:

- A. The named inventors, their attorneys or assigns, and/or other individuals associated with the filing and/or prosecution of the '798 patent intentionally withheld from the Patent Office material information and intentionally made materially misleading statements to the Patent Office.
- B. For example, the named inventors, their attorneys and/or their assigns intentionally withheld from the Patent Office known material prior art and/or materially misrepresented to the Patent Office the state of the prior art with respect to:
 - 1. A technical paper created by the Dexter Corporation in September of 1994 teaching that an advantage to using certain of their encapsulants was "a flat surface for pick and place automated processing."
 - 2. Materials received from the Dexter Corporation in 1994 that describe Hysol® FP4450 and Hysol® FP4650 as "self-leveling" encapsulants.

3. A technical paper created by the Dexter Corporation in February of 1994 teaching a technique where “a low flow encapsulant” is used to create a potting ring that forms “a window around a chip” and “the center area over chip and wires is filled in with the high flow version” of the encapsulant.

C. As another example, the named inventors, their attorneys and/or their assigns intentionally withheld from the Patent Office known material prior art and/or materially misrepresented to the Patent Office the state of the prior art with respect to:

1. A technical standard published by the Joint Electron Device Engineering Council (“JEDEC”) and relating to packaging standards with respect to the dimensions and tolerances of packaged IC devices.

2. A technical standard related to dimensions and tolerances published by the American National Standards Institute (“ANSI”) and entitled the ANSI Y14.5.

D. As a further example, the named inventors, their attorneys and/or their assigns intentionally withheld from the Patent Office known patents that were material prior art. Specifically, these parties failed to disclose U.S. Patent Nos. 3,606,673 (“the ‘673 patent”); 3,413,713 (“the ‘713 patent”); and 3,444,441 (“the ‘441 patent”).

1. Each of these patents describe the encapsulation of a plurality of semiconductor chips mounted to a lead-frame substrate using a continuous encapsulant and thereafter singulating the array into individual package sites.

2. Motorola was aware of all three of these patents long before the Quan application was filed. Indeed, the ‘673 patent was cited during the prosecution of

at least six patents assigned to Motorola, and both the '713 and '441 patents are assigned to Motorola.

- E. This information was known to the inventors and, on information and belief, was known to the attorneys who were prosecuting the applications and officers of Motorola. It was intentionally withheld from the Patent Office.

EIGHTH AFFIRMATIVE DEFENSE

57. On information and belief, the '814 patent is unenforceable as a result of patent misuse, the owner of the '814 patent is estopped from asserting it against ST NV and its subsidiaries, and ST NV and its subsidiaries have an implied license to the '814 patent based on actions taken by Motorola, including but not limited to the following:

- A. Motorola is a member of the Nexus 5001 Forum and participated in the creation and promulgation of the Institute of Electrical and Electronics Engineers' ("IEEE's") "Standard for a Global Embedded Processor Debug Interface" ("Standard"). The Forum Bylaws provide for a forty-five day review period during which "the nominated representatives of the Members shall disclose patent applications that are personally known to those representatives that relate to the proposed Standard or Amendment." Although the patent is related to the Standard, Motorola failed to disclose the existence of the '814 patent.

1. The Forum steering committee formally notified Members of their obligations in a memo: "Notifications of patent applications or claims that relate to the draft specification should be submitted in confidence to the Nexus 5001 Forum steering committee . . ."

2. Both Ron Stence, Motorola's Forum representative, and the Forum steering committee interpreted the duty to disclose as including the duty to disclose both existing patents and currently pending applications. (Email from Ron Stence, Nexus 5001 Forum Representative for Motorola, to Greg Kohn, Nexus 5001 Forum Program Manager (Feb. 10, 2003, 11:47:52 EST)).
 3. Motorola failed to disclose to the organization the existence of the '814 patent and has now alleged infringement based on an ST device that complies with the Nexus 5001 Forum Standard.
- B. As previously stated, Motorola actively participated in the creation and promulgation of the IEEE's Standard, did not disclose the '814 patent to the Forum, and has now chosen to assert this patent against devices that comply with the Standard.
- C. By failing to disclose the patent to the Forum and, upon information and belief, by such other acts known to Motorola in its dealings with the Nexus Forum and its members, Motorola has acted in bad faith and impermissibly broadened the scope of the '814 patent grant with an anti-competitive effect.

NINTH AFFIRMATIVE DEFENSE

58. On information and belief, the '563 patent is unenforceable as a result of inequitable conduct in its procurement, including but not limited to the following acts:

- A. Motorola's attorneys, in connection with the filing and/or prosecution of the '563 patent, intentionally withheld from the Patent Office material information and intentionally made materially misleading statements to the Patent Office.

B. For example, Motorola's attorneys intentionally withheld from the Patent Office known material prior art and/or materially misrepresented to the Patent Office the state of the prior art with respect to the Itoh et. al article cited during the prosecution of the '563 patent.

1. The article is identified on the face of the '563 patent as Itoh et al., "Extremely High Efficient UHF Power MOSFET for Handy Transmitter," IEDM, 1983, pp. 95-97.
2. A named inventor of the '563 patent attended a conference in 1983 during which the Itoh et al. article was presented. The Itoh et al. article was belatedly cited to the U.S. Patent and Trademark Office ("PTO").
3. A Motorola employee obtained an RF power semiconductor device made by Hitachi ("the Hitachi device") that was partially described in the Itoh et al. article. The Hitachi device was reverse engineered, and the inventors of the '563 patent were aware of the results of this process. The named inventors then set upon making an improvement to this Hitachi device, which is described in the '563 patent.
4. The Hitachi device is prior art as to the '563 patent at least under 35 U.S.C. Sec. 102 (a).
5. Both the Hitachi device and the inventors' device included a semiconductor chip or die having multiple source and drain regions formed in an epitaxial layer, which in turn had been formed on an underlying substrate. The improvement included, most significantly, providing multiple deep P+ regions (commonly known as "sinks") that extended from the top surface of the epitaxial layer down to the underlying substrate to electrically connect the

associated top-side source regions to the substrate and through the substrate to the back side of the die. In contrast, the Hitachi device had a single P⁺ sinker extending from the top surface down to the substrate.

6. During the prosecution of the '563 patent, the prosecuting attorney filed a "Supplemental Amendment" on February 11, 1992 and argued the patentability of the claims, including Claim 4, over the Itoh et al. article.
7. The Itoh et al. article discloses device features that were present in the prior art Hitachi device. The article, however, does not disclose the particular feature of a P⁺ sinker extending from the top surface of the epitaxial layer down to the substrate, which the prosecuting attorney knew was present in the prior art Hitachi device.
8. Claim 4 of the '563 patent, in pertinent part, calls for "a first region of the first conductivity type formed in the epitaxial layer, extending from the top surface down to the substrate, wherein the first region is more heavily doped than the epitaxial layer." This single "first region" corresponds to the single P⁺ sinker in the prior art Hitachi device. All other elements of Claim 4 are also found in the prior art Hitachi device.
9. In the remarks in the Supplemental Amendment, the prosecuting attorney argued the patentability of the claims over the Itoh et al article and stated: "Claims 1 and 4 now call for the first region to extend down to the substrate. This is not believed to be shown or suggested by the enclosed reference." The prior art Hitachi device was not cumulative of the Itoh et al. article because it specifically included such a first region (the P⁺ sinker) extending down to the substrate that the prosecuting attorney argued was not shown or suggested by the article.

- C. The prosecuting attorneys knew of the Hitachi device, knew that it was prior art as to the '563 patent application and the inventions claimed therein, knew that it was material to the patentability of at least Claim 4, and intentionally failed to identify the Hitachi device as prior art to the Patent Office. Therefore, at least Claim 4 of the '563 patent is unpatentable as anticipated by the prior art Hitachi device. As anticipatory prior art to at least Claim 4, the undisclosed Hitachi device was highly material to patentability, from which deceptive intent on the part of the prosecuting attorney can be inferred.
- D. Moreover, in the "Background of the Invention" section of the '563 specification, the prosecuting attorney intentionally described, in part, the Hitachi device in a manner deceptively calculated to lead the PTO to believe that it was the earlier work of the inventors rather than prior art. Indeed, that section does not identify the Hitachi device by name or state that it was prior art.
- E. During prosecution of the application that resulted in the '563 patent, Motorola's prosecuting attorney made no attempt to characterize the prior-art nature of the Hitachi device. Rather, the prosecuting attorney argued that the partial description of the Hitachi device that is contained in the Itoh article lacked the very feature (a deep P+ sinker) that she asserted made the claims (including Claim 4) patentable over the Itoh article. Yet she knew that the prior-art Hitachi device had such a feature but deceptively chose not to disclose that fact to the PTO.

TENTH AFFIRMATIVE DEFENSE

59. On information and belief, ST NV has an implied license to the '563 patent based on continuing transactions between Motorola and ST NV and/or its subsidiaries, including but not limited to the following:

- A. Insofar as Motorola and Freescale allege that the LDMOS products infringe claims of the '563 patent, ST NV and/or its subsidiaries have an implied license to the '563 patent.
1. Motorola and Freescale have accused LDMOS products of infringing the '563 patent.
 2. Motorola has purchased a substantial percentage of the LDMOS accused products, and, upon information and belief, Freescale will continue to purchase these products.
 3. The LDMOS products are made by ST NV subsidiaries based on specifications supplied by Motorola.
 4. Motorola's conduct has given rise to an implied license to the '563 patent to ST NV and/or its subsidiaries.
- B. By its actions, Motorola and Freescale have waived any damages or right to seek an injunctive relief from ST NV and/or its subsidiaries making, using, or selling LDMOS products.

COUNTERCLAIMS FOR DECLARATORY RELIEF

ST NV counterclaims against Motorola, Inc ("Motorola") and Freescale Semiconductor, Inc. ("Freescale") as follows:

INTRODUCTION

60. This is a counterclaim for a declaratory judgment that ST NV does not infringe, directly or indirectly, any valid claims of certain patents allegedly owned by Motorola or

Freescale. This action further seeks a declaration that the claims of these patents are invalid or otherwise unenforceable against ST NV.

THE PARTIES

61. Counterclaim-plaintiff ST NV is a corporation organized under the laws of the Netherlands with its registered office in Amsterdam, WTC Schiphol Airport, Schiphol Boulevard 265, 1118 BH Schiphol Airport, Amsterdam and its headquarters office in Geneva, 39 Chemin du Champ-des-Filles, 1228 Plan-les-Ouates, Geneva, Switzerland.

62. Freescale is a Delaware Corporation having a principle place of business at 6501 William Cannon Drive, Austin, Texas 78737. Freescale is a wholly owned subsidiary of Motorola and markets and sells semiconductor products throughout the United States, including in this District. On May 27, 2004, Motorola requested permission to join Freescale as a Counterclaim-Plaintiff in this action.

63. Upon information and belief, Motorola is a corporation organized and existing under the laws of the State of Delaware with its principal place of business at 1303 East Algonquin Road, Schaumburg, Illinois 60196. Motorola has appeared in this action and has filed responsive pleadings.

JURISDICTION AND VENUE

64. This is an action for Declaratory Judgment that the claims of U.S. Patent Nos. 5,155,563 ("the '563 patent"), 5,084,814 ("the '814 patent"), 5,5776,798 ("the '798 patent"), and 4,548,654 ("the '654 patent") are invalid and not infringed. This action is brought under the patent laws of the United States, 35 U.S.C. §§ 101 et seq. and the Federal Declaratory Judgment Act, 28 U.S.C. §§ 2201 et seq.

65. This Court has subject matter jurisdiction over this counterclaim, which arises under the patent laws of the United States, pursuant to 28 U.S.C. §§ 1331 and 1338(a). Venue is proper in this Court under 28 U.S.C. §§ 1391(b) and (c) and 1400(b).

66. Motorola's allegations of infringement in its Answer and Counterclaims create an actual controversy between ST NV and Motorola concerning the alleged infringement, validity, and enforceability of the '563, the '814, the '798, and the '654 patents.

67. This Court has personal jurisdiction over Motorola.

THE PATENTS

68. U.S. Patent No. 5,155,563 (the '563 patent), entitled "Semiconductor Device Having Low Source Inductance," was issued by the United States Patent and Trademark Office on October 13, 1992. According to Paragraph 31 of their Fourth Amended Answer and Counterclaim, Motorola and Freescale claim to own rights in and to the '563 patent and have asserted that certain products or acts by ST NV infringe the '563 patent.

69. United States Patent No. 5,084,814 (the '814 patent), entitled "Data Processor with Development Support Features," was issued by the United States Patent and Trademark Office on January 28, 1992. Motorola and Freescale claim to own rights in and to the '814 patent and have asserted that certain products or acts by ST NV infringe the '814 patent.

70. United States Patent No. 5,776,798 (the '798 patent), entitled "Semiconductor Package and Method Thereof," was issued by the United States Patent and Trademark Office on July 7, 1998. Motorola and Freescale claim to own rights in and to the '798 patent and have asserted that certain products or acts by ST NV infringe the '798 patent.

71. United States Patent No. 4,548,654 (the '654 patent), entitled "Surface Denuding of Silicon Wafer," was issued by the United States Patent and Trademark Office on October 22,

1985. Motorola and Freescale claim to own rights in and to the '654 patent and have asserted that certain products or acts by ST NV infringe the '654 patent.

FIRST COUNTERCLAIM

DECLARATORY JUDGMENT FOR NON-INFRINGEMENT AND INVALIDITY OF U.S. PATENT NO. 5,155,563

72. ST NV realleges and repeats paragraphs 60-71, as if fully set forth.

73. ST NV has not and does not infringe any valid and/or enforceable claim of the '563 patent. In addition, ST INC has not directly infringed, contributed to infringement, or induced infringement of any valid and/or enforceable claim of the '563 patent, nor is it directly infringing, contributing to infringement, or inducing infringement of any valid and/or enforceable claim of the '563 patent.

74. The '563 patent is unenforceable and is invalid and/or void for failing to satisfy the conditions of patentability set forth in Part II of Title 35 of the United States Code, including, but not limited to, §§ 102, 103, and 112 thereof.

SECOND COUNTERCLAIM

DECLARATORY JUDGMENT FOR NON-INFRINGEMENT AND INVALIDITY OF U.S. PATENT NO. 5,084,814

75. ST NV realleges and repeats paragraphs 60-71, as if fully set forth.

76. ST NV has not and does not infringe any valid and/or enforceable claim of the '814 patent. In addition, ST INC has not directly infringed, contributed to infringement, or induced infringement of any valid and/or enforceable claim of the '814 patent, nor is it directly infringing, contributing to infringement, or inducing infringement of any valid and/or enforceable claim of the '814 patent.

77. The '814 patent is unenforceable and is invalid and/or void for failing to satisfy the conditions of patentability set forth in Part II of Title 35 of the United States Code, including, but not limited to, §§ 102, 103, and 112 thereof.

THIRD COUNTERCLAIM

**DECLARATORY JUDGMENT FOR NON-INFRINGEMENT AND INVALIDITY OF U.S. PATENT NO.
5,776,798**

78. ST NV realleges and repeats paragraphs 60-71, as if fully set forth.

79. ST NV has not and does not infringe any valid and/or enforceable claim of the '798 patent. In addition, ST INC has not directly infringed, contributed to infringement, or induced infringement of any valid and/or enforceable claim of the '798 patent, nor is it directly infringing, contributing to infringement, or inducing infringement of any valid and/or enforceable claim of the '798 patent.

80. The '798 patent is unenforceable and is invalid and/or void for failing to satisfy the conditions of patentability set forth in Part II of Title 35 of the United States Code, including, but not limited to, §§ 102, 103, and 112 thereof.

FOURTH COUNTERCLAIM

**DECLARATORY JUDGMENT FOR NON-INFRINGEMENT AND INVALIDITY OF U.S. PATENT NO.
4,548,654**

81. ST NV realleges and repeats paragraphs 60-71, as if fully set forth.

82. ST NV has not and does not infringe any valid and/or enforceable claim of the '654 patent. In addition, ST INC has not directly infringed, contributed to infringement, or induced infringement of any valid and/or enforceable claim of the '654 patent, nor is it directly

infringing, contributing to infringement, or inducing infringement of any valid and/or enforceable claim of the '654 patent.

83. The '654 patent is unenforceable and is invalid and/or void for failing to satisfy the conditions of patentability set forth in Part II of Title 35 of the United States Code, including, but not limited to, §§ 102, 103, and 112 thereof.

84. EXCEPTIONAL CASE This case is exceptional under 35 U.S.C. § 285.

PRAYER FOR RELIEF


Wherefore, ST NV prays for judgment against Motorola and Freescale as follows:

- (a) Adjudge and decree that ST NV does not infringe any claim of United States Patent No. 5,155,563, United States Patent No. 4,548,654, United States Patent No. 5,776,798, and/or United States Patent No. 5,084,814;
- (b) Adjudge and decree that United States Patent No. 5,155,563, United States Patent No. 4,548,654, United States Patent No. 5,776,798, and/or United States Patent No. 5,084,814 are partially or wholly invalid and/or unenforceable;
- (c) Adjudge and decree that the claims against ST NV be dismissed with prejudice;
- (d) Adjudge and decree that Motorola's remedies for infringement of the '798 patent and the '654 patent, in any, are limited by 35 U.S.C. § 287(b);
- (e) Adjudge and decree that Motorola's remedies for infringement of the '563 patent and the '814 patent, in any, are limited by 35 U.S.C. § 287(a);
- (f) Adjudge and decree that the '798 patent is unenforceable as a result of inequitable conduct in its procurement;

- (g) Adjudge and decree that Motorola and Freescale have misused the '814 patent, are estopped from asserting the '814 patent against ST NV and its subsidiaries, and ST NV and its subsidiaries have an implied license to the '814 patent.
- (h) Adjudge and decree that the '563 patent is unenforceable as a result of inequitable conduct in its procurement;
- (i) Adjudge and decree that ST NV and its subsidiaries have an implied license to the '563 patent;
- (j) Award ST NV costs in this action, pre-judgment and post judgment interest on any award to ST NV, declare that this is an exceptional case under 35 U.S.C. § 285, and award ST NV its reasonable attorneys fees; and
- (k) Award ST NV all such other legal and equitable relief and remedy as justice may require.

Respectfully submitted,

**ATTORNEYS FOR
COUNTERCLAIM DEFENDANT
STMicroelectronics, N.V.**

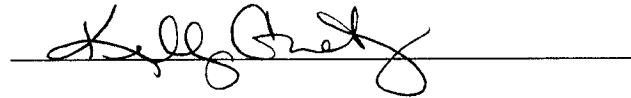

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CERTIFICATE OF SERVICE

The undersigned certifies that on October 1, 2004, a true and correct copy of the foregoing document was served on all counsel of record under the Eastern District ECF Local Rules.

A handwritten signature in black ink, appearing to read "Kelly G. Gentry", is written over a horizontal line.

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